Optical Spectroscopic Search for Infalling Planetesimals in Herbig Be Stars

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We report initial results from an on-going first systematic optical high resolution spectroscopic survey for planetesimal infalls around 50 young Herbig Be stars ($M > 5M_{Sun}$, with age between 0.1 and 2 Myr) using the high resolution spectrograph of the Hobby-Eberly Telescope ($R = 30,000$). The detection of Falling Evaporating Bodies (FEB) around an extremely young Herbig Be star, LkHα 234 ($\sim$ 0.1 Myr; *Chakraborty, Ge and Mahadevan*, 2004) provides the first evidence of planet formation in young intermediate mass stars earlier than A type. Frequency of the FEB events in the LkHα 234 system and how common the FEBs exist among Herbig Be stars will be discussed.

[a] Chakraborty, A., Ge, J., and Mahadevan, S., Evidence of Planetesimal Infall onto the Very Young Herbig Be Star LkHα 234, *ApJ*, **606**, L69–L72, 2004.